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## **Intel Computer Clubhouse**

### **Abstract**

The Tacoma branch of the Intel Community Clubhouse (ICC) provides at-risk youth in the largely African-American Hilltop area of Tacoma access to computers and technology training. The program is strongly driven by the interests of its youth population, focusing on tech support certification along with various forms of creative media production including digital video, audio, and photography. The center places an emphasis on creating producers, rather than consumers, of media, and on fostering leadership skills and community participation among its youth members. Data from one staff member, the ICC founder and coordinator, was collected on July 13, 2007, and data from four users between the ages of 14 and 16 was collected on July 17, 2007. Participants have identified benefits as increased personal growth and responsibility, leadership at home and in the community, improved school performance, and increased professionalism. Community impacts are both concrete, in the form of affordable technical services provided by the youth, and abstract, in the form of increased awareness and greater positive youth participation. Users had few improvements to suggest, though staff acknowledged the financially precarious position of depending on grants. Self-support activities are being pursued along with grants to ensure the ICC's sustainability.

### **Background**

The Tacoma Intel Community Clubhouse (ICC), located at 1209 Martin Luther King, Jr. Way, was founded in 1999 with the aim of positively impacting the lives of at-risk youth. The clubhouse is hosted by the Tacoma Urban League and the Intel Corporation, and partners with the Allen Renaissance, Inc. and Evergreen State College, Tacoma. It receives additional funding from the Bill and Melinda Gates Foundation and the Microsoft Corporation.

The Tacoma branch of the ICC serves a youth population (ages 10 through 18) in the racially diverse neighborhood of Hilltop. According to the 2000 U.S. Census, 22% of Hilltop residents are living below the poverty line. The ICC coordinator stated that all of its users live below the poverty line, 50% live in transient living situations, and 25% are homeless. Based on our observations, the majority of users are African-American, as is the majority of the neighborhood.

ICC provides local youth with a creative and safe environment to develop their media interests and technology skills, but also to build confidence and leadership. The clubhouse offers four main programs; an after-school open computer lab where users can work on creative projects with their peers and adult mentors, an all-girl math, science and engineering program that meets twice a week, an all-boy math, science and engineering program that meets twice a week, and a program that trains youth to become A+ Certified computer technicians. Because the clubhouse leaders believe it is important to have technology tools available at all times, the clubhouse lends laptops to users, and mentors help users figure out ways to purchase technology. In addition to technology training, users can receive social agency referrals, meals, and get help with job and college searches and applications.

The clubhouse itself is housed in a former store, surrounded by abandoned buildings. The entrance windows are decorated with brightly painted plywood cutouts of young people, presumably to keep the glass from being broken. As we waited with the youth participants to be let in, one of them told us that he had arrived particularly early because some “kids” that are not in the program had been hanging around wanting to “break in and do stupid stuff like kids do.”

The excitement of students was apparent as they flooded into the center once the doors opened, rushing to grab one of the twenty computers that were spread throughout the main room. The clubhouse was painted in calm shades of light purple and blue, and the lights were kept low for the duration of our visit. On the right side of the room there is a fully enclosed studio and a small, partially walled room with more computers. A small hallway connects to a large, bright room with a conference table in the middle and tables along the perimeter that are used for fixing broken computers.

### **Data Collection**

Data was collected over the course of two visits to the Tacoma ICC. On the first visit, which took place on July 13, 2007, researchers interviewed one staff member, the ICC founder and coordinator. This conversation lasted an hour and took place at the Allen Renaissance, Inc. (ARI) offices, a nonprofit 501 (c) (3) organization that is part of the Allen African Methodist Episcopal church. The organization’s mission is to develop underserved communities through economic and social empowerment.

On the second visit, which took place on July 17, 2007, data was collected at the ICC center from four users between the ages of 14 and 16. The participants in the focus group included: John,<sup>1</sup> a 15-year old male who had been attending ICC for two years and was interested in music and technology; Adam, a 16-year old male and Connor a 14-year old male, who had both been attending ICC for three years and were interested in fixing computers; Kaye, a 16-year old female; Pam, a 15-year old female who had been attending ICC for two years and was interested in photography and video production. The participants in the focus group all spoke English as a first language and lived close to the clubhouse. The number of people in each household varied from between two to six members. The coordinator was present throughout the focus group and occasionally offered prompts to the students.

### **Staff Interview**

When asked about the kinds of information users seek most, the ICC coordinator replied that it depended on their individual interest, explaining that users with an interest in music may choose to learn the basics of rap or how to score a film, the filmmakers may be opened up to new ways of showcasing their films, for example through Web sites such as Youtube, the writers can involve themselves in projects such as writing a modern day Othello or researching script writing, and the students in the A+ certification program may use the Internet to download drivers for computer operating systems.

The ICC coordinator pointed out that the strong support received from staff has a significant impact on user success. Staff give referrals to community services, help students get jobs by writing letters of recommendation, and introduce them to influential community leaders. ICC staff members also help users to attain technology tools, explore

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<sup>1</sup> All participants have been given aliases to protect their privacy.

their own interests in a technical environment and to become creators of technology, not just consumers.

The coordinator believes that the combination of the four programs they offer, namely the after-school open computer lab, the all-girl and all-boy math, science, and engineering program, and the A+ Certificate program, have made a significant impact on users. She explained, "In combining the programs, at least 50% of the users have gone on to college, 10-15% currently work in technical fields, and the rest are still around working in a technical environment." She went on to say that 13 of the current ICC users are working in technical internships and contract positions for the summer, and all of the youth who have been using the clubhouse for one to three years have shown academic improvement. In addition, one of the ICC participants, at 11 years old, became Microsoft's youngest intern. According to the ICC coordinator, the skills they learn at the center go beyond the technological: "All of the programs are interdisciplinary and the kids learn integrated skills using different applications and solving complex problems. This produces well-rounded kids. They have to trouble shoot when the technology doesn't work and try to solve the problem."

Another benefit of ICC use is that students are given increased responsibility, as the center works to foster future community leaders. Students can be promoted to the clubhouse board and become teaching assistants or assistant coordinators. They are also given the opportunity to teach technology skills at local middle and elementary schools. All of the lessons and skills that youth learn at the clubhouse place them on a pathway to success.

When asked how families of ICC users have benefited from the technology center, the coordinator replied that parents have the advantage of knowing that their children are in a safe environment doing productive activities. Parents are free to come in and be with the children while they're learning, and are also encouraged to volunteer at ICC events. The coordinator expressed that it is important that the "parents know what their kids are doing and that they're in a safe place."

The community also benefits from the clubhouse, in fact, giving back to the community is a critical element of the ICC philosophy. The coordinator explained that they operate under the concept of "Sankofa," an African term and ICC principle that means one must go back and reclaim one's past in order to move forward. Under this model, youth learn how to participate in their communities. For example, ICC users created promotional videos and ESL tutorials for the Tacoma Community House, a non-profit organization that provides assistance to local immigrant communities. This provided low-cost resources for the organization to help immigrants learn English. Some of these immigrants were then trained in technical programs at the clubhouse and went on to work at the ICC. Students in the A+ Certificate program fix computers for local businesses and organizations. Many users continue this tradition of community participation as adults, returning to the ICC to become clubhouse mentors or going on to volunteer elsewhere in the community. Youth are also encouraged to look beyond their locality and think globally. On one project, ICC users and staff raised money for a trip to Ghana where they visited a Liberian refugee camp and provided Internet connections and computer assistance to residents.

Although ICC receives generous support from many avenues, money is always a challenge for non-profit organizations. The coordinator informed us that ICC is currently renovating a larger building in order to expand its operations, but that funding is still

needed for this project. Ideally, the ICC coordinator would like to develop the clubhouse into a series of campuses where each of the four programs could have its own designated space. She would like ICC to create stronger and more partnerships with schools, colleges, and local businesses. She would also like to offer non-technical services at the ICC such as social services, mental health, medical and dental aid, and services for transients and gang members. She believes that an endowment could be crucial to the growth of the center, stating that they need “a financial support system so that the financial burden isn’t central to the mission.”

### *User Focus Group*

The participants in the focus group were first asked to name their occupation, to which they self-identified as a computer programmer, teacher, technician, and musician. Only after questioning by the moderator did they also include student as an occupation.

While one user heard about the ICC through a friend, the others found out about it through an adult figure in their life. For example, Connor’s stepmother was tired of him playing video games at home and took him to the ICC in the hope of finding something more constructive to occupy his free time. Pam’s aunt, an employee at the Evergreen State College, heard about the clubhouse at work and thought that her niece might be interested in its programs.

Although all of the users have computers at home, they still reported that they spend a considerable amount of time at the ICC. The center is open Monday through Friday from 3:00-7:30 and most of the users said they come at least three days a week for the entire duration of its opening hours.

Users gave a variety of reasons for coming to the ICC. John told us that he originally came because he thought it would help him get a job. Once there, however, he became interested in creating his own music through technology. Connor initially came to the clubhouse to play video games but after spending time around the center he became involved in fixing computers. Pam attended the girl’s math, science, and engineering program at Evergreen State College, and wanting to continue gaining knowledge in these areas, decided to visit the ICC.

ICC is important to the users for different reasons. Pam commented that the clubhouse is a place that provides her with the opportunity to learn and develop her education. She spoke about how she finds it difficult to concentrate in school, but can learn more easily at the tutoring sessions offered at the ICC. Adam feels that his voice is listened to at the ICC. He also sees technology as important for his future working life, and wants to be properly prepared. John loves the friendly working atmosphere at ICC, and the fact that tutors and adult mentors are helping him learn about technology and life in general. Pam elaborated on this idea to say that she likes that everyone at the center is like a family.

The users spoke about a variety of different skills that they have acquired at the ICC. Some have learned how to design and build Web sites, others have utilized software programs such as Scratch that facilitate the creation of interactive stories, games, animations and music, and still more have learned how to use video editing software such as Pico Met. Other students have focused on building their own software, or troubleshooting and fixing broken computers. John mentioned that he was excited to be able to access and use a Macintosh computer, having only PC access at home. Some users spoke about how they have learned to combine non-computer related activities with

technology projects. For example, on one project students were given the opportunity to shadow a professional photographer and then learned how to use Photoshop to edit the pictures.

In addition to acquiring technology skills, users also gain other advantages from using the ICC. Connor was in and out of trouble before he started coming to the clubhouse because he had too much free time. “Now,” he stated “I learn to do stuff.” Connor is working on computer hardware and software and interested in participating in the program’s computer repair business. The clubhouse keeps him occupied and off the streets. Two of the female students reported that they saw improvements in their math abilities since attending the ICC classes. Pam was able to quantify the change in the form of a shift from B grades to straight A’s. Some students also indicated that the ICC has provided them with the tools and mentorship to develop their leadership skills, and an increased ability to problem solve and think critically. One user, for example, remembered that he “never knew how to use his computer, and used to get in fights with it and slap it around, but now [he] knows how to think about it and think about the problem.” In short, his ability to conceptualize the problem and then solve it has improved.

Users feel that their families have benefited from their attendance at the ICC. Participants are able to pass on the skills they learn at the center to those at home. Kaye explained, “I got to teach my sister and Mom how to use some stuff on computers.” Families can also experience an improved family atmosphere. For example, Adam’s dad showed increased pride in his son, complimenting him on how responsible he had become since attending the ICC, while Pam’s grandma also feels that she has gained a sense of responsibility through clubhouse activities.

The users did not see any challenges to using the ICC. John commented that no matter what query he has, there is always someone at the clubhouse who can provide him with answers. Pam pointed out that there were no transport obstacles that prevented ICC use because all of the students live close by. John also stated that if students want to explore new avenues at the ICC, they can simply let the coordinator know and she will make it possible. As an example, he spoke about the time that Adam expressed an interest in learning to fix computers and the coordinator responded by setting up the A+ Certificate program for computer technicians. John concluded by giving the coordinator credit for “always ask[ing] us and involve[ing] us in leadership.”

When asked how the ICC could be made better, there were few comments. John mentioned that the facility could “maybe” be better. Adam commented that although they are encouraged to give back to the community at ICC, they could possibly do even more for the community. All users have recommended the clubhouse to family and friends, and all were in unanimous agreement that they will continue to use the ICC.

## **Analysis**

The impact of the ICC is positive for the students on an individual level, as well as providing concrete benefits for their families and the community at large. The students spend their time at the center in useful professional training programs rather than in the more common and often less stimulating teenage jobs. The students reported better grades since attending the ICC, increased technology and critical thinking skills, better leadership abilities, and personal growth in areas such as responsibility. As a result, all of the students are more confident about their educational and employment prospects. This

was demonstrated when students self-identified as professionals such as a computer programmer, teacher, computer technician and musician, rather than as a student.

In addition to improving the community by simply being participants rather than distractions, the students attending the clubhouse actively give back to their families and the community at large. Students teach family and friends computer skills. They pass on their technology knowledge at local schools, and offer low-cost computer repair and the creation of promotional materials to local organizations. Community members who otherwise might not have been able to afford such services reap benefits while students gain the opportunity to improve their knowledge and gain real-life experience.

Digital inclusion is strongly fostered by the programs at the ICC. Youth who would have been traditionally poorly represented in the technical community, now conceptualize themselves as technically savvy and members of that professional community. The efforts of the CTC to bring technology to the homes of users, and the positive recommendations of users to their families and friends, creates a kind of viral marketing system that operates as an effective way of spreading the digital message. As valued members of the community, their words about the ICC and the digital world in general is more trustworthy to the community than the encouragement of external authority figures. Thus, the digital divide is addressed both immediately and in the long term through the hard work and dedication of organizations such as Tacoma Intel Computer Clubhouse.

### Appendix 3: Center photographs



Figure 1: View of the ICC user entrance in the alley, showing plywood window covers and brightly painted cutouts.



Figure 2: Further view of ICC as the user faces it.



Figure 3: View of the ICC (red building at right) from Martin Luther King, Jr. Way, the 'official front' but unofficial back entrance. The far left building is a thrift shop, the middle building is empty.



Figure 4: Neighborhood view of opposite side of Martin Luther King, Jr. Way, taken from the back of the ICC

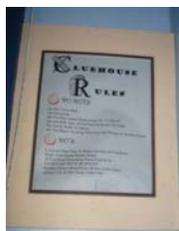


Figure 5: Clubhouse rules, posted at inner entrance and passed by all users. Rules are split into Do Nots and Do's.

**Do Nots are as follows: Do not chew gum; Do not swear; Do not play games before 6:30 or internet; Do not roll, spin, or put feet or knees on the chair; Do not be rude to others; Do not blame anything that you did wrong on another person. Do's are as follows: Everyone must sign in before getting on computer; Wash your hands before snack; If you drop something please pick it up; EVERYONE MUST BE POLITE; Respect others (read rules before field trips); Always eat at the green table only.**